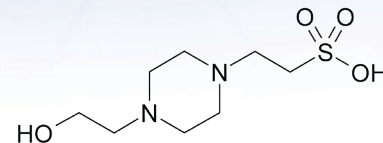


HEPES, Free Acid

TECHNICAL PRODUCT SHEET

INTENDED FOR USE IN DIAGNOSTIC AND LABORATORY APPLICATIONS

HEPES is a zwitterionic buffer used to maintain pH of media used in cell cultures. It is one of Good's twelve buffers that has a pKa value similar to its pH value making it an ideal buffer for pH maintenance. It has only one restriction, it interferes with the Folin protein assay. This buffer can form radicals so it is not suitable for redox studies. HEPES is used as a Good's buffer because it has low UV absorptivity, minimal reactivity, stable pH and is soluble in water.



CAS #: 7365-45-9

Molecular Formula: C₈H₁₈N₂O₄S

Solubility in Water (g/L): 400

F.W.: 238.30 g/mol

pH @ 20°C: 5.6 – 6.5

Useful pH: 6.8 – 8.2

pKa @ 20°C: 7.5

BIO ULTRA GRADE / Product Code: HEPE-5220 | Previously: HE5220

C₈H₁₈N₂O₄S · F.W. 238.30 g/mol. · CAS# 7365-45-9

These are general specifications. BioSpectra will customize our products to meet your quality based requirements.

ANALYSIS		SPECIFICATIONS
	250 nm	0.060 a.u. max.
Absorbance (0.1M)	260 nm	0.060 a.u. max.
	280 nm	0.080 a.u. max.
Appearance and Color		White / Crystals
Assay		99.0% min.
Identification (IR)		Passes Test
pH (5% Soln.)		5.0 – 6.5
Residue on Ignition		0.2% max.
Solubility (5%)		Passes Test

General Product Description:

- HEPES is a White Crystalline product.
- Molecular Formula: C₈H₁₈N₂O₄S
- Molecular Weight: 238.30 g/mol.
- CAS Number: 7365-45-9.
- Synonyms: N-(2-Hydroxyethyl)piperazine-N'-2-ethanesulfonic acid, 2-[4-(2 hydroxyethyl)piperazin-1-yl]ethanesulfonic acid.



Intended Use Statement:

Material represented by this grade is suitable to be used only as the following: Quality System Manufactured Process Chemical for use in further manufacturing or as a reagent for laboratory and research. The material represented by this grade is not suitable to be used as an Excipient, Active Pharmaceutical Ingredient, Drug, Drug Product or household item.

Expiration/Retest Date:

BioSpectra does not assign expiration or retest dates for Bio Ultra Grade materials.

Storage and Shipping Conditions:

Ship and Store in ambient temperature.

Package Sizes:

10kg, 25kg and 50kg pails.

